

IN THE CLAIMS:

Please cancel Claims 12 to 18, 23 and 24 without prejudice or disclaimer of subject matter, and amend Claims 1, 10 and 20 as shown below. The claims, as pending in the subject application, read as follows:

1. (Currently Amended) A color processing method of determining a combination of color material signals of a plurality of kinds of color materials for reproducing a color represented by an input color signal, said method comprising ~~the steps~~ of:

using a processor to perform the steps of:

obtaining a plurality of combinations of the plurality of kinds of color materials, each of the combinations being capable of reproducing a color represented by the input color signal;

setting a function ~~which is smooth and nonlinear and~~ which represents a relation between ~~[[a]]~~ color signal and a total use amount of the color materials and in which a change in the total use amount of the color materials of the input color signal is continuous with a change in the input color signal, wherein the function is set based on a color signal of a representative color and a total use amount of the color materials of the representative color;

calculating the total use amount of the color materials corresponding to the input color signal by using the set function; and

determining the combination of color material signals corresponding to the input color signal ~~[[from]]~~ based on the obtained plurality of combinations of the plurality

of kinds of color materials, ~~based on the input color signal and by using~~ the calculated total use amount of the color materials.

2. (Cancelled)

3. (Previously Presented) A color processing method as claimed in claim 1, wherein said step of determining the combination includes determining the combination corresponding to the input color signal with reference to a table, which determines the combination of the plurality of kinds of color material so that the total use amount of the color materials is determined according to the combination of the plurality of kinds of color materials, and meets the function for the total use amount within a range for the input color signal.

4. (Previously Presented) A color processing method as claimed in claim 1, wherein the function is a spline function.

5. (Previously Presented) A color processing method as claimed in claim 4, wherein said step of setting the function includes displaying a function for a total use amount for a predetermined color on a display device and setting the function based on input by an operation on the display.

6. (Previously Presented) A color processing method as claimed in claim 1, wherein of the plurality of kinds of color materials comprise yellow, magenta, cyan, and black.

7. (Previously Presented) A color processing method as claimed in claim 1, wherein the plurality of kinds of color materials comprise yellow, magenta, cyan, black, and light magenta, having lower concentration than the magenta, and light cyan, having lower concentration than the cyan.

8. (Previously Presented) A color processing method as claimed in claim 1, wherein the color materials comprise inks.

9. (Previously Presented) A color processing method as claimed in claim 1, wherein the color materials comprise toners.

10. (Currently Amended) A color processing apparatus for determining a combination of color material signals of a plurality of kinds of color materials for reproducing a color represented by an input color signal, comprising:

means for obtaining a plurality of combinations of the plurality of kinds of color materials, each of the combinations being capable of reproducing a color represented by the input color signal,

means for setting a function ~~which is smooth and nonlinear and~~ which represents a relation between $[[a]]$ color signal and a total use amount of the color materials

and in which a change in the total use amount of the color materials of the input color signal is continuous with a change in the input color signal, wherein the function is set based on a color signal of a representative color and a total use amount of the color materials of the representative color;

means for calculating the total use amount of the color materials corresponding to the input color signal by using the set function; and

means for determining the combination of color material signals corresponding to the input color signal ~~[[from]]~~ based on the obtained plurality of combinations of the plurality of kinds of color materials, ~~based on the input color signal~~ and by using the calculated total use amount of the color materials.

11. to 19. (Cancelled)

20. (Currently Amended) A computer-readable medium storing a program to make a computer execute a color processing method of determining a combination of color material signals of a plurality of kinds of color materials for reproducing a color represented by an input color signal, said method comprising the steps of:

obtaining a plurality of combinations of the plurality of kinds of color materials, each of the combinations being capable of reproducing a color represented by the input color signal;

setting a function ~~which is smooth and nonlinear and~~ which represents a relation between ~~[[a]]~~ color signal and a total use amount of the color materials and in which a change in the total use amount of the color materials of the input color signal is

continuous with a change in the input color signal, wherein the function is set based on a color signal of a representative color and a total use amount of the color materials of the representative color;

calculating the total use amount of the color materials corresponding to the input color signal by using the set function; and

determining the combination of color material signals corresponding to the input color signal ~~[[from]]~~ based on the obtained plurality of combinations of the plurality of kinds of color materials, ~~based on the input color signal and by using~~ the calculated total use amount of the color materials.

21. (Previously Presented) A color processing method as claimed in claim 1, wherein the representative color is a color having a highest saturation in each of hues of colors of the plurality of kinds of color materials.

22. (Previously Presented) A color processing method as claimed in claim 1, wherein said determining step determines the combination of the color material signals by selecting a combination of the color material signals nearest to a combination of the color material signals corresponding to input color signal of the calculated total use amount, from the plurality of combinations of the plurality of kinds color materials.

23. to 24. (Cancelled)